For your future reference

We recommend keeping your guarantee card and a record of the following information to assist with any repair under warranty.

Serial No.   Date of purchase

(found on the bottom of the base unit)

Name and address of dealer

```
┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
│                                          │
│        Attach your purchase receipt here.│
│                                          │
```
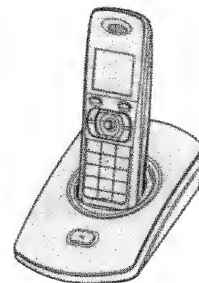
TG8301 HK

PNQX1200ZA   CC0708DQ0   HK-2/2

Panasonic

Operating Instructions

Digital Cordless Phone
Model No. KX-TG8301HK

SMS

This unit is compatible with Caller ID and SMS. You must subscribe to the appropriate service offered by your service provider/telephone company.

Charge the batteries for about 7 hours before initial use.

Please read these operating instructions before using the unit and save them for future reference.

Product information

Thank you for purchasing a Panasonic digital cordless phone.

Accessory information

Supplied accessories

No.	Accessory item/Part number	Quantity
①	AC adaptor for base unit/PQLV207E	1
②	Telephone line cord	2
③	Rechargeable batteries[*1]	2
④	Handset cover[*2]	1
⑤	Belt clip	1

*1 See page 3 for replacement battery information.
*2 The handset cover comes attached to the handset.

Additional/replacement accessories

Please contact your nearest Panasonic dealer for sales information.
For enquiry, please call hotline 2313 0666.

No.	Accessory item	Model number
①	Headset	KX-TCA89BX
②	DECT repeater	KX-A272

Replacement battery information:
- Replace batteries only with a nickel metal hydride (Ni-MH) type of battery. This model requires 2 AAA (R03) batteries for every handset. For best performance, we recommend using Panasonic rechargeable batteries (Model No. HHR-4MPT).
- Replacement batteries may have a different capacity from that of the supplied batteries.

Expanding your phone system

You can expand your phone system by registering optional handsets (max. 6) to a single base unit.

Handset (optional): KX-TGA830HM

For your safety

To prevent severe injury and loss of life/property, read this section carefully before using the product to ensure proper and safe operation of your product.

WARNING

Power connection

- Use only the power source marked on the product.
- Do not overload power outlets and extension cords. This can result in the risk of fire or electric shock.
- Completely insert the AC adaptor/power plug into the power outlet. Failure to do so may cause electric shock and/or excessive heat resulting in a fire.
- Regularly remove any dust, etc. from the AC adaptor/power plug by pulling it from the power outlet, then wiping with a dry cloth. Accumulated dust may cause an insulation defect from moisture, etc. resulting in a fire.
- Unplug the product from power outlets if it emits smoke, an abnormal smell, or makes an unusual noise. These conditions can cause fire or electric shock. Confirm that smoke has stopped emitting and contact an authorised service centre.
- Never touch the plug with wet hands. Danger of electric shock exists.

Installation

- To prevent the risk of fire or electrical shock, do not expose the product to rain or any type of moisture.
- Do not place or use this product near automatically controlled devices such as automatic doors and fire alarms.

Radio waves emitted from this product may cause such devices to malfunction resulting in an accident.

Operating safeguards

- Unplug the product from power outlets before cleaning. Do not use liquid or aerosol cleaners.
- Do not disassemble the product.
- Do not spill liquids (detergents, cleansers, etc.) onto the telephone line cord plug, or allow it to become wet at all. This may cause a fire. If the telephone line cord plug becomes wet, immediately pull it from the telephone wall jack, and do not use.

Medical

- Consult the manufacturer of any personal medical devices, such as pacemakers or hearing aids, to determine if they are adequately shielded from external RF (radio frequency) energy. (The product operates in the frequency range of 1.88 GHz to 1.90 GHz, and the RF transmission power is 250 mW (max.).)
- Do not use the product in health care facilities if any regulations posted in the area instruct you not to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

CAUTION

Installation and relocation

- Never install telephone wiring during an electrical storm.
- Never install telephone line jacks in wet locations unless the jack is specifically designed for wet locations.

- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- The AC adaptor is used as the main disconnect device. Ensure that the AC outlet is installed near the product and is easily accessible.
- This product is unable to make calls when:
  – the handset batteries need recharging or have failed.
  – there is a power failure.
  – the key lock feature is turned on.

Battery

- We recommend using the batteries noted on page 3. **USE ONLY rechargeable Ni-MH batteries AAA (R03) size.**
- Do not mix old and new batteries.
- Do not open or mutilate the batteries. Released electrolyte from the batteries is corrosive and may cause burns or injury to the eyes or skin. The electrolyte may be toxic if swallowed.
- Exercise care when handling the batteries. Do not allow conductive materials such as rings, bracelets or keys to touch the batteries, otherwise a short circuit may cause the batteries and/or the conductive material to overheat and cause burns.
- Charge the batteries provided with or identified for use with this product only, in accordance with the instructions and limitations specified in this manual.
- Only use a compatible base unit (or charger) to charge the batteries. Do not tamper with the base unit (or charger). Failure to follow these

instructions may cause the batteries to swell or explode.

Important safety instructions

When using your product, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Do not use this product near water for example, near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
2. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
3. Do not use the telephone to report a gas leak in the vicinity of the leak.
4. Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.

SAVE THESE INSTRUCTIONS

For best performance

Base unit location/avoiding noise
The base unit and other compatible Panasonic units use radio waves to communicate with each other.
- For maximum coverage and noise-free communications, place your base unit:
  – at a convenient, high, and central location with no obstructions

between the handset and base unit in an indoor environment.
  – away from electronic appliances such as TVs, radios, personal computers, wireless devices or other phones.
  – avoid facing radio frequency transmitters, such as external antennas of mobile phone cell stations (avoid putting the base unit on a bay window or near a window).
- Coverage and voice quality depends on the local environmental conditions.
- If the reception for a base unit location is not satisfactory, move the base unit to another location for better reception.

Environment
- Keep the product away from electrical noise generating devices, such as fluorescent lamps and motors.
- The product should be kept free from excessive smoke, dust, high temperature, and vibration.
- The product should not be exposed to direct sunlight.
- Do not place heavy objects on the power cord or top of the product.
- When you leave the product unused for a long period of time, unplug the product from the power outlet.
- The product should be kept away from heat sources such as radiators, cookers, etc. It should not be placed in rooms where the temperature is less than 5 °C or greater than 40 °C. Damp basements should also be avoided.
- The maximum calling distance may be shortened when the product is used in the following places: Near obstacles such as hills, tunnels, underground, near metal objects such as wire fences, etc.

- Operating the product near electrical appliances may cause interference. Move away from the electrical appliances.

Routine care
- **Wipe the outer surface of the product with a soft moist cloth.**
- Do not use benzine, thinner, or any abrasive powder.

Notice for product disposal, transfer, or return
- This product can store your private/confidential information. To protect your privacy/confidentiality, we recommend that you erase the information such as phonebook or caller list entries from the memory before you dispose of, transfer, or return the product.
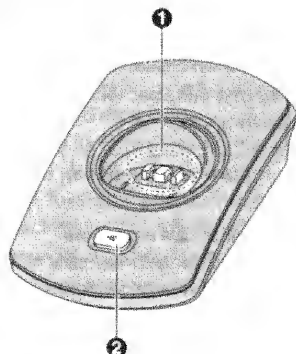
Information on Disposal in other Countries outside the European Union

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.
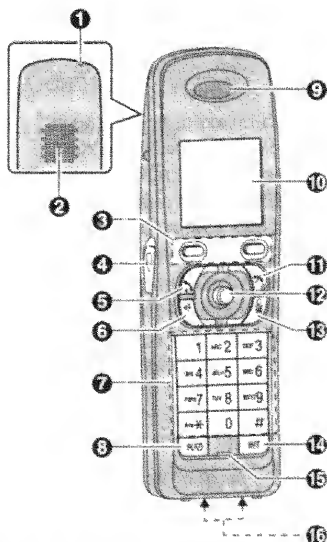
Controls

Base unit


❶ Charge contacts
❷ [·)))] (Locator)

Handset

❶ Charge indicator
   Ringer indicator
❷ Speaker
❸ Soft keys
❹ Headset jack
❺ [✆] (Talk)
❻ [◁] (Speakerphone)
❼ Dial keypad
❽ [R/⏰]
   R: Recall/Flash
   ⏰: Alarm shortcut key
❾ Receiver
❿ Display
⑪ [✂⏻] (Off/Power)
⑫ Joystick
⑬ [C/⌀] (Clear/Mute)
⑭ [INT] (Intercom)
⑮ Microphone
⑯ Charge contacts

Using the joystick

The handset joystick can be used to navigate through menus and to select items shown on the display by pushing it up [▲], down [▼], left [◄], or right [►]. **To adjust the receiver or speaker volume**, push the joystick up to increase the volume, or down to decrease the volume repeatedly while talking.

Volume up

Volume down
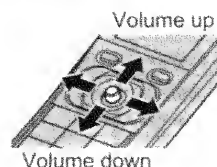
Soft keys

The handset features 2 soft keys and a joystick. By pressing a soft key, or by pressing the centre of the joystick, you can select the feature shown directly above it on the display.
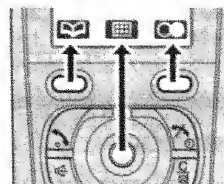
Display

Handset display items

Item	Meaning
ϒ	Within range of a base unit • When flashing, Handset is searching for base unit. (page 48)
·)))	Handset is accessing base unit. (intercom, paging, changing base unit settings, etc.)
☎	Handset is on an outside call.
→)	Missed call[*1] (page 31)
🔋	Battery level
⏰	Alarm is on. (page 25)
⟨	Voice enhancer is set. (page 18)
✂	Call privacy mode is on. (page 18)
⌀	Ringer volume (page 22) is off.
☽	Night mode is on. (page 26)
[1]	Handset number (standby display setting, page 23)
-1-	Base unit number (standby display setting, page 23)
×¦	Call matches an entry in the bar call list.[*1] (page 27, 32)
✉	New SMS message received.[*2] (page 36)

Item	Meaning
⌨	Your written SMS message is over 160 characters.[*2] (page 34)
⊘	SMS memory is full.[*2]
⊠	New voice mail message received.[*3] (page 39)
IN USE	Someone is using the line.

*1 Caller ID subscribers only
*2 SMS users only
*3 Voice mail subscribers only

Menu icons

When in standby mode, pressing down on the centre of the joystick reveals the handset's main menu. From here you can access various features and settings.

Icon		Feature
⤵	⇥	Caller List
✉	⬚	SMS (Short Message Service)
⊙	⬚	Time Settings
▯	⬚	Handset Setup
◈	⬚	Base Unit Setup
✎	⬚	Incoming No. Bar

Soft key icons

| Icon	Action
⬿	Returns to the previous screen.
⬚	Displays the menu.
OK	Accepts the current selection.
◎	Displays a previously dialled phone number.
☒	Opens the phonebook.
☒	Stores phone numbers in the bar call list. (page 28)
◎	Displays the phonebook search menu.
⚷	Turns the key lock feature off. (page 18)
1/A/?	Selects a character entry mode.
P	Inserts a dialling pause.
X	Erases the selected item.
▦	No function

Connections

Connect the AC adaptor cord (❶) by pressing the plug firmly (❷). Connect the telephone line cord until it clicks into the base unit and telephone line jack (❸).

Base unit

- Use only the supplied Panasonic AC adaptor PQLV207E.
- Use only the supplied telephone line cord. Using another telephone line

cord may not allow the unit to work properly.

Hook
To telephone line
(220-240 V AC, 50 Hz)
Hook
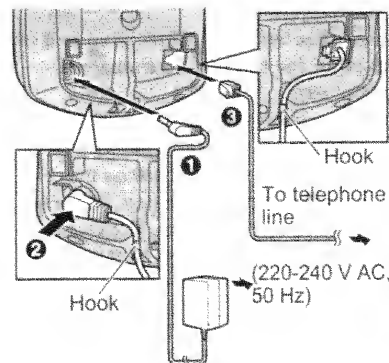
Note:
- The AC adaptor must remain connected at all times. (It is normal for the adaptor to feel warm during use.)
- The AC adaptor should be connected to a vertically oriented or floor-mounted AC outlet. Do not connect the AC adaptor to a ceiling-mounted AC outlet, as the weight of the adaptor may cause it to become disconnected.
- If the unit is connected to a PBX system, please contact your PBX supplier.

During a power failure

The unit will not work during a power failure. We recommend connecting a corded-type telephone (without AC adaptor) to the same telephone line or to the same telephone line jack using a T-adaptor.

If you subscribe to a DSL/ADSL service

Please attach a DSL/ADSL filter (contact your DSL/ADSL provider) to the telephone line between the base unit and the telephone line jack in the event of the following:
- noise is heard during conversations.
- Caller ID features do not function properly.

To telephone line
DSL/ADSL filter
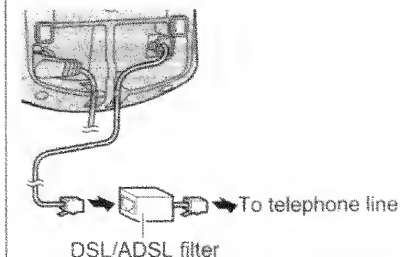
Battery installation and replacement

Important:
- Use the supplied rechargeable batteries (Part No. HHR-55AAAB).
- When installing the batteries:
  - Wipe the battery ends (⊕, ⊖) with a dry cloth.
  - Avoid touching the battery ends (⊕, ⊖) or the unit contacts.
  - Confirm correct polarities (⊕, ⊖).
- When replacing the batteries:
  - USE ONLY rechargeable Ni-MH batteries AAA (R03) size.
  - Do NOT use Alkaline/Manganese/Ni-Cd batteries.
  - We recommend using the Panasonic rechargeable batteries noted on page 3, 6.

1 Firmly press the notch on the handset cover and slide it in the direction of the arrow.
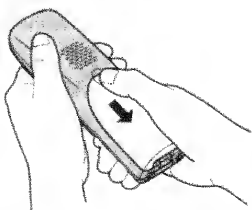
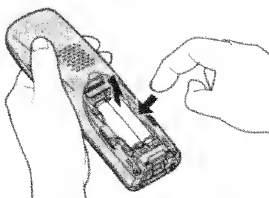**2** Insert the batteries negative (⊖) end first. Close the handset cover.

Rechargeable Ni-MH ONLY
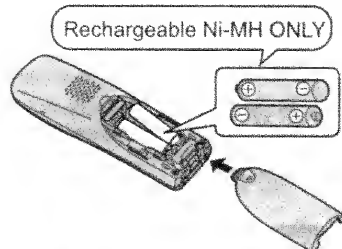
Important:
- If the handset does not automatically turn on after installing/replacing batteries, press **[✂①]** for about 1 second, or place the handset on the base unit or charger.
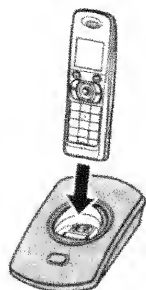
Note:
- When replacing batteries, remove the old batteries.

Battery charge

Place the handset on the base unit or charger for about 7 hours before initial use.
- While charging, "**Charging**" is displayed and the charge indicator on the handset lights up. When the batteries are fully charged, "**Charge Completed**" displays. The charge indicator stays lit even after the batteries are fully charged.

Note:
- It is normal for the handset to feel warm during charging.
- If you want to use the unit immediately, charge the batteries for at least 15 minutes.
- Clean the charge contacts of the handset, base unit, and charger with a soft, dry cloth once a month. Clean more often if the unit is exposed to grease, dust, or high humidity.

Battery level

Battery icon	Battery level
▤	High
▤	Medium
▢	Low • When flashing: Needs charging.

Panasonic Ni-MH battery performance (supplied batteries)

Operation	Operating time
In continuous use	15 hours max.
Not in use (standby)	250 hours (10 days) max.

Note:
- It is normal for batteries not to reach full capacity at the initial charge. Maximum battery performance is reached after a few complete cycles of charge/discharge (use).
- To maximise battery life, it is recommended that the handset batteries be fully discharged (used) until ▢ flashes once every few months.
- Actual battery performance depends on a combination of how often the handset is in use and how often it is not in use (standby).
- The battery level may not be displayed correctly after you replace the batteries. In this case, place the handset on the base unit or charger and let it charge for at least 7 hours.

Screen saver mode

The backlight goes dark when on a call or turns off completely after 1 minute of inactivity if the handset is not on the base unit or charger.
Activate the handset display again by:
- pushing the joystick left **[◄]** or right **[►]** when on a call.
- pressing **[✂①]** at all other times.

Symbols used in these operating instructions

| Symbol	Meaning
[ ]	The words in the brackets indicate button names on the handset and base unit. **Example:** Unit keys: **[↳]**, **[✂①]**
→	Proceed to the next operation.
" "	The words in quotations indicate the menu on the display. **Example:** "**Auto Talk**"
[▼]/[▲]: " "	Push the joystick down or up to select the words in quotations. **Example:** **[▼]/[▲]:** "**Off**"

Turning the power on/off

Power on

Press [✆①] for about 1 second.

Power off

Press [✆①] for about 2 seconds.

Setting up the unit before use

Display language

1   ▦ (centre of joystick) → ⏴ → OK

2   [▼]/[▲]: "Display Setup" → OK

3   [▼]/[▲]: "Select Language" → OK

4   [▼]/[▲]: Select your desired language. → OK → [✆①]

Note:
- If you select a language you cannot read: [✆①] → ▦ → ⏴ → OK → Push the joystick down 2 times. → OK → Push the joystick down 4 times. → OK → [▼]/[▲]: Select your desired language. → OK → [✆①]

Dialling mode

If you cannot make calls, change this setting according to your telephone line service. The default setting is "Tone".
"Tone": For tone dial service.
"Pulse": For rotary/pulse dial service.

1   ▦ (centre of joystick) → ⏴ → OK

2   [▼]/[▲]: "Dial Mode" → OK

3   [▼]/[▲]: Select the desired setting. → OK → [✆①]

Date and time

1   ▦ (centre of joystick) → ⏴ → OK

2   [▼]/[▲]: "Time Settings" → OK

3   [▼]/[▲]: "Set Date & Time" → OK

4   Enter the current date, month, and year.
    Example: 15 July, 2008
    [1][5] [0][7] [0][8]

5   Enter the current hour and minute.
    Example: 9:30 PM
    [0][9] [3][0] → Press [✳] until "09:30 PM" is displayed.

6   OK → [✆①]

Note:
- To correct a digit, use the joystick to move the cursor to the digit, then make the correction.
- The date and time may be incorrect after a power failure. In this case, set the date and time again.

Belt clip

You can hang the handset on your belt or pocket using the supplied belt clip.

To attach the belt clip
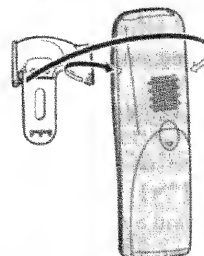
To remove the belt clip

Headset (optional)

Connecting a headset to the handset allows for hands-free conversations. We recommend using the Panasonic headset noted on page 3.

Making calls

1 Lift the handset and dial the phone number.
   • To correct a digit, press [C/☒].

2 [➚]

3 When you finish talking, press [✆○] or place the handset on the base unit or charger.

Using the speakerphone

1 Dial the phone number, and press [☜].
   • Speak alternately with the other party.

2 When you finish talking, press [✆○].

Note:
• For best performance, use the speakerphone in a quiet environment.
• To switch back to the receiver, press [➚].

Adjusting the receiver or speaker volume

Push the joystick up or down repeatedly while talking.

Making a call using the redial list

The last 10 phone numbers dialled are stored in the redial list (each 24 digits max.).

1 [◯] (right soft key)

2 [▼]/[▲]: Select the desired phone number.

3 [➚] / [☜]
   • If [☜] is pressed and the other party's line is engaged, the unit automatically redials multiple times. While the handset is waiting to redial, the ringer

indicator flashes. To cancel, press [✆○].

Editing/erasing/storing

1 [◯] (right soft key)

2 [▼]/[▲]: Select the desired phone number. → [▦]

3 Proceed with the desired operation.

   ■ **Editing a number before calling:**
   [▼]/[▲]: "Edit and Call" → [OK] → Use the joystick to move the cursor. → Edit the number. → [➚]

   ■ **Erasing a number:**
   [▼]/[▲]: Select "Erase" or "Erase All". → [OK] → [▼]/[▲]: "Yes" → [OK] → [✆○]

   ■ **Storing a number to the phonebook:**
   [▼]/[▲]: "Add Phonebook" → [OK] → To store the name, continue from step 3, "Adding entries", page 19.

Note:
• When editing:
   – To erase a number, place the cursor on the number, then press [C/☒].
   – To insert a number, place the cursor to the right of where you want to insert the number, then press the appropriate dial key.

Pause (for PBX/long distance service users)

A pause is sometimes required when making calls using a PBX or long distance service. When storing a calling card access number and/or PIN in the phonebook, a pause is also needed (page 21).

Example: If you need to dial the line access number "0" when making outside calls with a PBX:

1 [0] → [P]

2 Dial the phone number. → [➚]

Note:
• A 3 second pause is inserted each time [P] is pressed. Repeat as needed to create longer pauses.

Answering calls

When a call is being received, the ringer indicator on the handset flashes.

1 Lift the handset and press [➚] or [☜] when the unit rings.
   • You can also answer the call by pressing any dial key from [0] to [9], [✳], or [#]. (**Any key answer feature**)

2 When you finish talking, press [✆○] or place the handset on the base unit or charger.

Auto talk

You can answer calls simply by lifting the handset off the base unit or charger. You do not need to press [➚]. To turn this feature on, see page 23.

Adjusting the handset ringer volume

Push the joystick up or down repeatedly to select the desired volume while the handset is ringing for an incoming call.

Note:
• You can also program the handset ringer volume beforehand (page 22).

Useful features during a call

Mute

While mute is turned on, you can hear the other party, but the other party cannot hear you.

1 Press [C/☒] during conversation.

2 To return to the conversation, press [C/☒] again.

Recall/flash

[R/☉] allows you to use the special features of your host PBX such as transferring an extension call, or accessing optional telephone services.

Note:
• To change the recall/flash time, see page 23.

For call waiting or Call Waiting Caller ID service users

To use call waiting, you must first subscribe to the call waiting service of your service provider/telephone company.
This feature allows you to receive calls while you are already talking on the phone. If you receive a call while on the phone, you will hear a call waiting tone.
If you subscribe to both Caller ID and Call Waiting with Caller ID services, the 2nd caller's information is displayed after you hear the call waiting tone on the handset.

1 Press [R/☉] to answer the 2nd call.

2 To switch between calls, press [R/☉].

Note:

- Please contact your service provider/telephone company for details and availability of this service in your area.

Temporary tone dialling (for rotary/pulse service users)

You can temporarily switch the dialling mode to tone when you need to access touch-tone services (for example, telephone banking services).

1 Make a call.

2 Press [✳] when prompted to enter your code or PIN, then press the appropriate dial keys.

Note:

- The dialling mode will return to pulse when you hang up.

Handset voice enhancer

This feature clarifies the voice of the person you are talking to, producing a more natural-sounding voice that is easier to hear and understand.

1 Press 🔳 during a call.

2 [▼]/[▲]: "Voice Enhancer" → OK

3 [▼]/[▲]: Select "Off", "High Tone" or "Low Tone". → OK

Note:

- When this feature is turned on, (" is displayed.
- Depending on the condition and quality of your telephone line, this feature may emphasise existing line noise. If it becomes difficult to hear, turn this feature off.
- This feature is not available while using the speakerphone.

Call share

This feature allows you to join an existing outside call.
To join the conversation, press [➘] when the other handset is on an outside call.

Call privacy

Call privacy allows you to prevent other users from joining your conversations with outside callers. To allow other users to join your conversations, leave this feature off. The default setting is "Off".

1 Press 🔳 during an outside call.

2 [▼]/[▲]: "Privacy" → OK

3 [▼]/[▲]: Select the desired setting. → OK

- When this feature is turned on, ⬚ is displayed.

Note:

- This feature will turn off after you hang up the call.

Key lock

The handset can be locked so that no calls or settings can be made. Incoming calls can be answered, but all other functions are disabled while key lock is on.
To turn key lock on, press 🔳 (centre of joystick) for about 3 seconds.

- 🔳 is displayed.
- To turn key lock off, press 🔳 (centre of joystick) for about 3 seconds.

Note:

- Calls to emergency numbers cannot be made until key lock is turned off.

Handset phonebook

The phonebook allows you to make calls without having to dial manually. You can add 200 names and phone numbers, assign each phonebook entry to the desired category.

Adding entries

1 📞 (left soft key) → 🔳

2 [▼]/[▲]: "New Entry" → OK

3 Enter the party's name (16 characters max.; page 42). → OK

4 Enter the party's phone number (24 digits max.). → OK

5 [▼]/[▲]: Select the desired category. → OK 2 times

- To add other entries, repeat from step 3.

6 [✆]

Categories

Categories can help you find entries in the phonebook quickly and easily. When adding an entry to the phonebook, you can assign it to the desired category. You can change the names of categories assigned for phonebook entries ("Friends", "Family", etc.) and then search for phonebook entries by category. Additional category features are available for Caller ID subscribers (page 31).

Changing category names

1 📞 (left soft key) → 🔳

2 [▼]/[▲]: "Category" → OK

3 [▼]/[▲]: Select the desired category. → OK

4 [▼]/[▲]: "Category Name" → OK

5 Edit the name (10 characters max.; page 42). → OK → [✆]

Finding and calling a phonebook entry

Scrolling through all entries

1 📞 (left soft key)

2 [▼]/[▲]: Select the desired entry.

- You can scroll through the phonebook entry by pushing and holding the joystick down or up.

3 [➘]

Searching by first character (using a dial key)

1 📞 (left soft key)

2 Press the dial key ([0] to [9]) which contains the character you are searching for (page 42).

- Press the same dial key repeatedly to display the first entry corresponding to each character located on that dial key.
- If there is no entry corresponding to the character you selected, the next entry is displayed.
- To change the character entry mode:
  🔳 → [▼]/[▲]: "Index Search" → OK → [▼]/[▲]: Select the character entry mode. → OK

3 [▼]/[▲]: Scroll through the phonebook if necessary.

4 [➘]

Searching by category

1 📞 (left soft key) → 🔳

2 [▼]/[▲]: "Category Search" → OK

3 [▼]/[▲]: Select the desired category. → **OK**
- If you select "**All**", the unit ends the category search.

4 [▼]/[▲]: Scroll through the phonebook if necessary.

5 [☎]

Editing entries

1 Find the desired entry (page 19). → **▥**

2 [▼]/[▲]: "**Edit**" → **OK**

3 Edit the name if necessary (16 characters max.; page 42). → **OK**

4 Edit the phone number if necessary (24 digits max.). → **OK**

5 [▼]/[▲]: Select the desired category. → **OK** 2 times → [✀①]

Erasing entries

Erasing an entry

1 Find the desired entry (page 19). → **▥**

2 [▼]/[▲]: "**Erase**" → **OK**

3 [▼]/[▲]: "**Yes**" → **OK** → [✀①]

Erasing all entries

1 **▧** (left soft key) → **▥**

2 [▼]/[▲]: "**Erase All**" → **OK**

3 [▼]/[▲]: "**Yes**" → **OK**

4 [▼]/[▲]: "**Yes**" → **OK** → [✀①]

One touch dial

Assigning an entry in the phonebook to a one touch dial key

Dial keys [1] to [9] can each be used as a one touch dial key, allowing you to dial a number from the phonebook by simply pressing a dial key.

1 Find the desired entry (page 19). → **▥**

2 [▼]/[▲]: "**One Touch Dial**" → **OK**

3 [▼]/[▲]: Select the desired dial key number. → **OK**
- Where a dial key is already being used for one touch dialling, "＊" is displayed next to the dial key number. If you select this dial key, you can overwrite the previous assignment.

4 **OK** → [✀①]

Making a call using a one touch dial key

1 Press and hold the desired one touch dial key ([1] to [9]).
- You can view other one touch dial assignments by pushing the joystick down or up.

2 [☎]

Cancelling a one touch dial assignment

1 Press and hold the desired one touch dial key ([1] to [9]). → **▥** → **OK**

2 [▼]/[▲]: "**Yes**" → **OK** → [✀①]

Chain dial

This feature allows you to dial phone numbers in the phonebook while you are on a call. This feature can be used, for example, to dial a calling card access number or bank account PIN that you have stored in the phonebook, without having to dial manually.

1 During an outside call, press **▧**.

2 [▼]/[▲]: Select the desired entry.

3 Press **OK** to dial the number.

Note:
- When storing a calling card access number and your PIN in the phonebook as one phonebook entry, press **P** to add pauses after the number and PIN as necessary (page 16).
- If you are using this phone in pulse dialling mode, you may need to press [＊] to change the dialling mode to tone before chain dialling. When adding entries to the phonebook, we recommend adding [＊] to the beginning of phone numbers you wish to chain dial (page 19).

Copying phonebook entries

You can copy phonebook entries to the phonebook of another compatible Panasonic handset.

Note:
- Category settings for phonebook entries are not copied.

Copying an entry

1 Find the desired entry (page 19). → **▥**

2 [▼]/[▲]: "**Copy**" → **OK**

3 Enter the handset number you wish to send the phonebook entry to.
- When an entry has been copied, "**Completed**" is displayed.
- To continue copying another entry: [▼]/[▲]: "**Yes**" → **OK** → Find the desired entry. → **OK**

4 [✀①]

Copying all entries

1 **▧** (left soft key) → **▥**

2 [▼]/[▲]: "**Copy All**" → **OK**

3 Enter the handset number you wish to send the phonebook entry to.
- When all entries have been copied, "**Completed**" is displayed.

4 [✀①]

Programmable settings

You can customise the unit by programming the following features using the handset.

Programming by scrolling through the display menus

1 ▣ (centre of joystick)

2 Select the desired top-menu by pushing the joystick in any direction. → **OK**

3 Push the joystick down or up to select the desired item in sub-menu 1. → **OK**
   - In some cases, you may need to select from sub-menu 2. → **OK**

4 Push the joystick down or up to select the desired setting. → **OK**
   - This step may vary depending on the feature being programmed.
   - To exit the operation, press [✆①].

Note:
- For other top-menus, please refer to each chapter.
- In the following table, < > indicates the default settings.
- The current item or setting is highlighted on the display.

Top-menu	Sub-menu 1	Sub-menu 2	Page
Handset Setup 🕮	Time Settings	Set Date & Time [1]	14
		Memo Alarm	25
		Time Adjustment [1] <Manual>	25
	Ringer Setup	Ringer Volume <Maximum>	—
		Ringtone [2, 3] <Ringtone 1>	—
		Night Mode	26
		■ Start/End <23:00/06:00>	
		■ On/Off <Off>	
		■ Ring Delay <60 sec.>	
		■ Select Category	

Top-menu	Sub-menu 1	Sub-menu 2	Page
Handset Setup 🕮	Display Setup	Wallpaper <Wallpaper1>	—
		Display Colour <Colour1>	—
		Standby Display [4] <Off>	—
		LCD Dimming [5] <On>	—
		Select Language <English>	14
		Contrast <Contrast 3>	—
	Registration	Register H.set	28
	Select Base <Auto>	—	29
	Keytones [6] <On>	—	—
	Auto Talk [7] <Off>	—	17
Base Unit Setup [1] 🕮	Dial Mode <Tone>	—	14
	Recall/Flash [8] <400 msec.>	—	17
	Call Restrict	—	27
	Base Unit PIN <0000>	—	27
	Repeater Mode <Off>	—	30
Incoming No. Bar [1] 🕮	—	—	27

[1] If you program these settings using one of the handsets, you do not need to program the same item using another handset.

[2] If you select one of the melody ringer tones, the ringer tone continues to play for several seconds even if the caller has already hung up. You may either hear a dial tone or no one on the line when you answer the call.

[3] The preset melodies in this product are used with permission of © 2007 Copyrights Vision Inc.

[4] "Off": Displays the current date and time only.
"Handset Number": Displays the handset number such as "[1]".
"Base Number": Displays the base unit number such as "-1-".

*5 This feature allows the handset to switch itself to dimmed backlight mode after being placed on the base unit or charger.
  – "On": Backlight is dimmed.
  – "Off": Backlight turns off after 10 seconds of charging.

*6 Turn this feature off if you prefer not to hear key tones while you are dialling or pressing any keys, including confirmation tones and error tones.

*7 If you subscribe to a Caller ID service and want to view the caller's information after lifting up the handset to answer a call, turn off this feature.

*8 The recall/flash time depends on your telephone exchange or host PBX. Contact your PBX supplier if necessary.

Special instructions for programmable settings

Memo alarm

An alarm sounds at the set time for 3 minutes. A text memo can also be displayed for the alarm.
A total of 3 separate alarm times can be programmed for each handset.
You can set one of 2 different alarm options (once or daily) for each alarm time.

Important:
- Set the date and time beforehand (page 14).

1 ▦ (centre of joystick) → ▯ → **OK**

2 [▼]/[▲]: "Time Settings" → **OK**

3 [▼]/[▲]: "Memo Alarm" → **OK**

4 Select an alarm (1 to 3). → **OK**

5 [▼]/[▲]: Select the desired alarm option. → **OK**

"Off"
Turns alarm off. Press **OK** again, then press [✆] to exit.

"Once"
An alarm sounds once at the set time. Enter the desired date and month.

"Daily"
An alarm sounds daily at the set time.

6 Set the desired time. → **OK**

7 Enter a text memo (30 characters max.; page 42). → **OK**

8 [▼]/[▲]: Select the desired ringer tone. → **OK** 2 times

- We recommend selecting a different ringer tone to the one used for outside calls.
- When the alarm is set, ☼ is displayed.

9 [✆]

Note:
- You can skip to step 3 by pressing [R/☼] in standby mode.
- To stop the alarm, press any dial key or place the handset on the base unit or charger.
- When the handset is in use, the alarm will not sound until the handset is in standby mode.
- If you select "Once", the setting changes to "Off" after the alarm sounds.
- Even when the ringer volume for outside calls is set to off (page 22), the alarm sound is heard at a low level.

Time adjustment (Caller ID subscribers only)

This feature allows the unit to automatically adjust the date and time each time caller information is received. To use this feature, your caller ID service has to provide caller information, including date and time. Contact your service provider/telephone company for details.
To turn this feature on, select "Caller ID[Auto]". To turn this feature off, select "Manual".

Important:
- To use this feature, set the date and time first (page 14).

1 ▦ (centre of joystick) → ▯ → **OK**

2 [▼]/[▲]: "Time Settings" → **OK**

3 [▼]/[▲]: "Time Adjustment" → **OK**

4 [▼]/[▲]: Select "Caller ID[Auto]" or "Manual". → **OK** → [✕①]

Night mode

Night mode allows you to select a period of time during which the handset will not ring for outside calls. This feature is useful for time periods when you do not want to be disturbed, for example, while sleeping. Night mode can be set for each handset.

Using the phonebook's category feature (page 19), you can also select categories of callers whose calls override night mode and ring the handset (Caller ID subscribers only).

Important:
- Set the date and time beforehand (page 14).
- If you have set the alarm, the alarm sounds even if the night mode is turned on.

Setting the start and end time

1 ▦ (centre of joystick) → *i* → **OK**

2 [▼]/[▲]: "Ringer Setup" → **OK**

3 [▼]/[▲]: "Night Mode" → **OK**

4 [▼]/[▲]: "Start/End" → **OK**

5 Enter the desired hour and minute you wish to start this feature.

6 Enter the desired hour and minute you wish to end this feature.

7 **OK** → [✕①]

Note:
- To correct a digit, use the joystick to move the cursor to the digit, then make the correction.

Turning night mode on/off

1 ▦ (centre of joystick) → *i* → **OK**

2 [▼]/[▲]: "Ringer Setup" → **OK**

3 [▼]/[▲]: "Night Mode" → **OK**

4 [▼]/[▲]: "On/Off" → **OK**

5 [▼]/[▲]: Select the desired setting. → **OK** → [✕①]
- When the night mode is set, ☺ is displayed.

Setting the ring delay

This setting allows the handset to ring during night mode if the caller waits long enough. After the selected amount of time passes, the handset rings. If you select "No Ringing", the handset never rings during night mode.

1 ▦ (centre of joystick) → *i* → **OK**

2 [▼]/[▲]: "Ringer Setup" → **OK**

3 [▼]/[▲]: "Night Mode" → **OK**

4 [▼]/[▲]: "Ring Delay" → **OK**

5 [▼]/[▲]: Select the desired setting. → **OK** → [✕①]

Selecting categories to bypass night mode

1 ▦ (centre of joystick) → *i* → **OK**

2 [▼]/[▲]: "Ringer Setup" → **OK**

3 [▼]/[▲]: "Night Mode" → **OK**

4 [▼]/[▲]: "Select Category" → **OK**

5 Press the desired category numbers. → **OK**
- The selected category number flashes.
- To cancel a selected category number, press the number again. The number stops flashing.

6 [✕①]

Setting call restriction

You can restrict selected handsets from dialling certain numbers. You can assign up to 6 phone numbers to be restricted, and select which handsets are to be restricted. Storing area codes here prevents the restricted handsets from dialling any phone number in that area code.

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Call Restrict" → **OK**

3 Enter the base unit PIN (default: "0000").
- If you forget your PIN, contact your nearest Panasonic service centre.

4 Set which handsets to be restricted by pressing the desired handset number.
- All the registered handset numbers are displayed.
- Flashing numbers indicate call restriction is turned on for the corresponding handset.
- To turn call restriction off for a handset, press the number again. The number stops flashing.

5 **OK**

6 [▼]/[▲]: Select a memory location. → **OK**

7 Enter the phone number or area code to be restricted (8 digits max.). → **OK** → [✕①]
- To erase a restricted number, press [C/☒].

Changing the base unit PIN (Personal Identification Number)

Important:
- If you change the PIN, please make note of your new PIN. The unit will not reveal the PIN to you. If you forget your PIN, contact your nearest Panasonic service centre.

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Base Unit PIN" → **OK**

3 Enter the current 4-digit base unit PIN (default: "0000").

4 Enter the new 4-digit base unit PIN. → **OK** → [✕①]

Incoming call barring (Caller ID subscribers only)

This feature allows the unit to reject calls from specified phone numbers that you do not want to answer such as junk calls. You can store up to 20 phone numbers in the bar call list by using the caller list or by entering the numbers directly. When a call is received, the unit does not ring while the caller is being identified. If the phone number matches an entry in the bar call list, the unit sends out a busy tone to the caller, then disconnects the call.

Important:
- You must store the phone number with an area code in the bar call list.
- When the unit receives a call from a number that is stored in the bar call list, the call is disconnected and the number is logged in the caller list (page 32) with ✕.

Storing unwanted callers from the caller list

1 [image] (centre of joystick) → ꄼ → **OK**

2 [▼]/[▲]: Select the item to be barred. → [image]

3 [▼]/[▲]: "Add Bar List" → **OK**

4 [✆☉]

Storing unwanted callers by entering phone numbers

1 [image] (centre of joystick) → ꄷ → **OK** → [image]

2 Enter the phone number (24 digits max.). → **OK**
   • To erase a digit, press [C/☒].

3 [✆☉]

Viewing/editing/erasing bar call numbers

1 [image] (centre of joystick) → ꄷ → **OK**

2 [▼]/[▲]: Select the desired item. → [image]
   • To exit, press [✆☉].

3 Proceed with the desired operation.

   ■ Editing a number:
   [▼]/[▲]: "Edit" → **OK** → Use the joystick to move the cursor. → Edit the number. → **OK** → [✆☉]

   ■ Erasing a number:
   [▼]/[▲]: "Erase" → **OK** → [▼]/[▲]: "Yes" → **OK** → [✆☉]

Note:
• When editing, press the desired dial key to add, [C/☒] to erase.

Registering a unit

Operating additional units

Additional handsets

Up to 6 handsets can be registered to a single base unit.

Important:
• The additional handset model recommended for use with this unit is noted on page 4. If another handset model is used, certain operations (handset settings, base unit settings, etc.) may not be available.

Additional base units

Handsets can be registered to up to 4 base units, allowing you to add additional base units and extend the area in which your handset(s) can be used. If a handset moves out of range of its base unit when "Auto" is selected on base unit (page 29), it looks for another base unit to make or receive calls. A base unit and the handsets it communicates with is called a "radio cell".

Note:
• Calls are disconnected when the handset moves from one radio cell to another.

Registering a handset to a base unit

The supplied handset and base unit are pre-registered. If for some reason the handset is not registered to the base unit (for example, Ⓨ flashes even when the handset is near the base unit), register the handset.

1 **Handset:**
   [image] (centre of joystick) → ꄷ → **OK**

2 [▼]/[▲]: "Registration" → **OK** 2 times

3 [▼]/[▲]: Select a base unit number. → **OK**
   • This number is used by the handset as a reference only.

4 **Base unit:**
   Press and hold [•))] for about 5 seconds. (No registration tone)
   • If all registered handsets start ringing, press the same button to stop. Then repeat this step.
   • The next step should be completed within 90 seconds.

5 **Handset:**
   Wait until "Enter Base PIN" is displayed. → Enter the base unit PIN (default: "0000"). → **OK**
   • If you forget your PIN, contact your nearest Panasonic service centre.
   • When the handset has been registered successfully, Ⓨ stops flashing.

Note:
• When you purchase an additional handset, refer to the additional handset's installation manual for registration.

Selecting a base unit

When "Auto" is selected, the handset automatically uses any available base unit it is registered to. When a specific base unit is selected, the handset makes and receives calls using that base unit only. If the handset is out of range of that base unit, no calls can be made.

1 [image] (centre of joystick) → ꄷ → **OK**

2 [▼]/[▲]: "Select Base" → **OK**

3 [▼]/[▲]: Select the desired base unit number, or "Auto". → **OK**
   • The handset starts searching for the base unit.

Deregistering a handset

A handset can cancel its own registration (or the registration of another handset) that is stored in the base unit. This allows the handset to end its wireless connection with the system.

1 [image] (centre of joystick) → ꄷ → **OK**

2 [3][3][5]

3 [▼]/[▲]: "Deregistration" → **OK**
   • The numbers of all handsets registered to the base unit are displayed.

4 Select the handset(s) you want to cancel by pressing the desired handset number. → **OK**
   • The selected handset number(s) flashes.
   • To cancel a selected handset number, press the number again. The number stops flashing.

5 [▼]/[▲]: "Yes" → **OK**
   • A confirmation tone sounds as each handset number disappears.

- The handset does not beep when cancelling its own registration.

6 [✖①]

Cancelling a base unit

A handset can cancel a base unit that it is registered to. This allows the base unit to end its wireless connection with the system.

1 ▥ (centre of joystick) → ∅ → OK

2 [▼]/[▲]: "Registration" → OK

3 [3][3][5]

4 [▼]/[▲]: "Cancel Base" → OK

5 Select the base unit(s) you want to cancel by pressing the desired base unit number. → OK

- The selected base unit number(s) flashes.
- To cancel a selected base unit number, press the number again. The number stops flashing.

6 [▼]/[▲]: "Yes" → OK → [✖①]

Note:

- To register a handset to another base unit or to the same base unit again, see page 29.

Increasing the range of the base unit

You can increase the signal range of the base unit by using a DECT repeater. Please use only the Panasonic DECT repeater noted on page 3. Contact your Panasonic dealer for details.

Important:

- Before registering the repeater to this base unit, you must turn the repeater mode on.
- Do not use more than one repeater at a time.

Setting the repeater mode

1 ▥ (centre of joystick) → ∅ → OK

2 [▼]/[▲]: "Repeater Mode" → OK

3 [▼]/[▲]: Select the desired setting. → OK → [✖①]

Note:

- After turning the repeater mode on or off, ⊤ flashes on the handset momentarily. This is normal and the handset can be used once ⊤ stops flashing.

Using Caller ID service

Important:

- This unit is Caller ID compatible. To use Caller ID features, you must subscribe to a Caller ID service. Contact your service provider/ telephone company for details.

Caller ID features

When an outside call is being received, the caller's phone number is displayed. Caller information for the last 50 callers is logged in the caller list from the most recent call to the oldest.

- If the unit cannot receive caller information, the following is displayed:
  - "Out of Area": The caller dialled from an area which does not provide a Caller ID service.
  - "Private Caller": The caller requested not to send caller information.
- If the unit is connected to a PBX system, caller information may not be properly received. Contact your PBX supplier.

Missed calls

If a call is not answered, the unit treats it as a missed call and ➔) is displayed. This lets you know if you should view the caller list to see who called while you were away. Even if only one missed call in the caller list is viewed (page 32), ➔) disappears from the display. When you receive another new call, ➔) is displayed again.

Phonebook name display

When caller information is received and it matches a phone number stored in the phonebook, the stored name in the phonebook is displayed and logged in the caller list.

Category settings for phonebook

Category settings can help you identify who is calling by using different ringer tones and display colours for different categories of callers. When adding an entry to the phonebook you can assign it to the desired category (page 19). When a call is received from a caller assigned to a category, the category's display colour and ringer tone you selected are used.

Changing category ringer tones

If you select "Default Ringer", the unit uses the ringer tone you set on (page 22) when calls from this category are received. The default setting is "Default Ringer".

1 ▨ (left soft key) → ▥

2 [▼]/[▲]: "Category" → OK

3 [▼]/[▲]: Select a category. → OK

4 [▼]/[▲]: Select the current setting of the category ringer tone. → OK

5 [▼]/[▲]: Select the desired ringer tone. → OK → [✖①]

Changing category display colours

If you select "Default Colour", the unit uses the display colour you set on (page 23) when calls from this category are received. The default setting is "Default Colour".

1 ▨ (left soft key) → ▥

2 [▼]/[▲]: "Category" → OK

3 [▼]/[▲]: Select a category. → OK

4 [▼]/[▲]: Select the current setting of the category colour. → OK

5 [▼]/[▲]: Select the desired colour. → OK → [✖①]

Caller list

Important:
- Only 1 person can access the caller list at a time.

Viewing the caller list and calling back

1   ▦ (centre of joystick) ⟶ ⤹ ⟶ **OK**

2   Push the joystick down to search from the most recent call, or push the joystick up to search from the oldest call.

3   To call back, press **[↰]**. To exit, press **[✕☉]**.

Note:
- If the item has already been viewed or answered, "✓" is displayed, even if it was viewed or answered using another handset.
- To erase the item, press **✕** . ⟶ **[▼]/[▲]**: "Yes" ⟶ **OK**
- If the call matches an entry in the bar call list, the number is logged with ✕ (page 27).

Editing a caller's phone number before calling back

1   ▦ (centre of joystick) ⟶ ⤹ ⟶ **OK**

2   **[▼]/[▲]**: Select the desired entry. ⟶ ▦

3   **[▼]/[▲]**: "Edit and Call" ⟶ **OK**

4   Edit the number.
- Press dial key (**[0]** to **[9]**) to add, **[C/☒]** to delete.

5   **[↰]**

Erasing caller information

1   ▦ (centre of joystick) ⟶ ⤹ ⟶ **OK**

2   **[▼]/[▲]**: Select the desired entry. ⟶ ▦

3   **[▼]/[▲]**: Select "Erase" or "Erase All". ⟶ **OK**

4   **[▼]/[▲]**: "Yes" ⟶ **OK** ⟶ **[✕☉]**

Storing caller information to the phonebook

1   ▦ (centre of joystick) ⟶ ⤹ ⟶ **OK**

2   **[▼]/[▲]**: Select the desired entry. ⟶ ▦

3   **[▼]/[▲]**: "Add Phonebook" ⟶ **OK**

4   To store the name, continue from step 3, "Adding entries", page 19.

Using SMS

SMS allows you to send and receive text messages between other fixed-line and mobile phones that support compatible SMS networks and features.
Messages can also be forwarded by your SMS provider to fax machines and e-mail addresses.

Important:
- To use SMS features, you must:
  – subscribe to a Caller ID and/or an appropriate service.
  – confirm that SMS is turned on.
  – confirm that the correct message centre numbers are stored.
  Contact your service provider/telephone company for details and availability.
- This unit cannot send or receive Chinese characters.
  – Messages that contain only Chinese characters cannot be sent or received.
  – If a message contains Chinese characters and non-Chinese characters, "This message contains unrecognized characters." will be displayed and the Chinese characters will be displayed as "_". (Non-Chinese characters will be displayed normally.)
- This unit cannot send or receive images or ringtones.

Using public mailbox and public keys
SMS messages can be sent and received using the public mailbox. SMS messages can also be received using one of the 6 public keys, which are password protected to ensure privacy.

Important:
- To receive a message using a public key, you must first create the public key by storing its name and password (page 37).

Note:
- A total of 47 messages (at 160 characters/message) in all mailboxes added together can be saved. Total number may be more than 47 if length of messages is less than 160 characters/message.
- If the unit is connected to a PBX system, you may not be able to use SMS features.

Turning SMS on/off

The default setting is "On".

1   ▦ (centre of joystick) ⟶ ✉ ⟶ **OK**

2   **[▼]/[▲]**: "Settings" ⟶ **OK**

3   **[▼]/[▲]**: "SMS On/Off" ⟶ **OK**

4   **[▼]/[▲]**: Select the desired setting. ⟶ **OK** ⟶ **[✕☉]**

Storing SMS message centre numbers

SMS message centre numbers must be stored in order to send and receive SMS messages.
The message centre numbers are pre-programmed in this unit. You can change them if necessary. Contact your service provider/telephone company for more information.

1   ▦ (centre of joystick) ⟶ ✉ ⟶ **OK**

2   **[▼]/[▲]**: "Settings" ⟶ **OK**

3 [▼]/[▲]: Select "Message Centre1" or "Message Centre2". → **OK**

4 Edit the number as necessary. → **OK** 2 times → [✆⊙]

Note:

- For PBX users:
  - You need to add the PBX line access number and a dialling pause to the beginning of the Message Centre 1 number.
  - If you only use the Message Centre 1 number for SMS, store the Message Centre 1 number as is (without adding a line access number or dialling pause) to Message Centre 2.

Sending a message

Writing and sending a new message to a phone

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Create" → **OK**
- If "▲Use Last Text?" is displayed, you can use the text from the last message you created by pushing the joystick up.

3 Enter the message (page 42). → **OK**

4 Enter the destination phone number (20 digits max.). → **OK**

■ **Using the redial list:**
Press [⊙] repeatedly to select the phone number. → **OK** 2 times

■ **Using the caller list:**
[▼]/[▲]: Select the party. → **OK** 2 times

■ **Using the phonebook:**
[📖] → [▼]/[▲]: Select the phonebook entry. → **OK** 2 times

5 To save the message, select "Yes". → **OK**

6 To send the message, press **OK**.
- To cancel sending, press [✆⊙].

Note:

- This unit supports SMS messages of up to 640 characters, however, the maximum number of characters you can send or receive may be limited by your SMS service provider/telephone company. Contact your SMS service provider/telephone company for details.
- If your message contains over 160 characters, the message is a long message and ☜ is displayed. Your service provider/telephone company may treat long messages differently from other messages. Contact your service provider/telephone company for details.
- If your phone is connected to a PBX, store the PBX line access number (page 37).

Sending a message to a specific person

For privacy, you can send a message to a specific person if you know the person's public key (mailbox name).

1 Write a message (page 34), but do not send it.

2 Before selecting "Send", select "Public Key". → **OK**

3 Enter the public key (5 characters max.). → **OK**

4 [▼]/[▲]: "Send" → **OK**

Requesting a receipt when sending a message

When sending a message, you can request a receipt to be sent to you when your message has been sent by your SMS provider.

1 Write a message (page 34), but do not send it.

2 Before selecting "Send", select "Receipt". → **OK**

3 [▼]/[▲]: "Yes" or "No" → **OK**

4 [▼]/[▲]: "Send" → **OK**

Writing and sending a new message to a fax

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Create" → **OK**

3 Enter the message. → **OK** → ▦

4 [▼]/[▲]: "Fax Number" → **OK**

5 Enter the fax number (20 digits max.). → **OK**

6 Enter a header to be printed at the top of the fax (50 characters max.). → **OK**

7 To save the message, select "Yes". → **OK**

8 [▼]/[▲]: "Send" → **OK**

Writing and sending a new message to an e-mail address

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Create" → **OK**

3 Enter the message. → **OK** → ▦

4 [▼]/[▲]: "E-Mail Address" → **OK**

5 Enter the e-mail address (70 characters max.). → **OK**

6 To save the message, select "Yes". → **OK**

7 [▼]/[▲]: "Send" → **OK**

Sending a saved message

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Send List" → **OK**

3 To read a saved message, push the joystick down or up to select the message. → **OK**

4 To send the message, press ▦. → [▼]/[▲]: "Send" → **OK**

5 Press and hold [C/☒] to erase all numbers.

6 Continue from step 4, "Writing and sending a new message to a phone", page 34.

Editing and sending a saved message

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Send List" → **OK**

3 [▼]/[▲]: Select a message. → **OK**

4 ▦ → [▼]/[▲]: "Edit Message" → **OK**

5 Continue from step 3, "Writing and sending a new message to a phone", page 34.

Erasing saved messages

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Send List" → **OK**

3 [▼]/[▲]: Select a message. → **OK**

4 ▦ → [▼]/[▲]: "Erase" → **OK**

- To erase all messages, select
"Erase All". → **OK**

5 [▼]/[▲]: "Yes" → **OK** → [✆☉]

Note:

- If "Inform SMSC?" is displayed, select "Yes" then press **OK** to have the unit inform the SMS message centre that memory is now available to receive new messages.

Receiving a message

When an SMS message is received:
- "Receiving SMS Message" is displayed.
- a tone is heard (if the handset ringer is turned on).
- ✉ is displayed with the total number of new (unread) SMS messages.

Reading a received message

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Receive List" → **OK**

3 Proceed with the desired operation.
  ■ **To access the public mailbox**
  [▼]/[▲]: "Public" → **OK**
  ■ **To access a private mailbox**
  [▼]/[▲]: Select the desired mailbox. → **OK** → Enter its password.
    - If a mailbox contains new (unread) SMS messages, "*" is displayed next to the total number of messages for that mailbox.

4 [▼]/[▲]: Select a message.
    - Messages which have already been read are indicated by a "✓", even if they were read using another handset.

- To erase a message, press **✕**.
  → [▼]/[▲]: "Yes" → **OK**

5 Press **OK** to read the message content.

Note:

- To call the message sender, press [✆].

Replying to a message

1 While reading a received message, press ▦.

2 [▼]/[▲]: "Reply" → **OK**

3 Enter a message (page 42). → **OK**

4 Edit the destination phone number and/or press **OK**.

5 Continue from step 5, "Writing and sending a new message to a phone", page 34.

Editing/forwarding a message

1 While reading a received message, press ▦.

2 [▼]/[▲]: "Edit Message" → **OK**

3 Continue from step 3, "Writing and sending a new message to a phone", page 34.

Erasing received messages

1 While reading a received message, press ▦.

2 [▼]/[▲]: "Erase" → **OK**
    - To erase all messages in the selected mailbox, select "Erase All". → **OK**

3 [▼]/[▲]: "Yes" → **OK** → [✆☉]

Storing the sender's number in the phonebook

1 While reading a received message, press ▦.

2 [▼]/[▲]: "Add Phonebook" → **OK**

3 To store the name, continue from step 3, "Adding entries", page 19.

Editing the sender's number before calling back

1 While reading a received message, press ▦.

2 [▼]/[▲]: "Edit and Call" → **OK**

3 Edit the number. → [✆]

Other settings

Storing/changing the public keys

Public keys are similar to mailboxes, and allow you to password protect your received messages. You can create 6 public keys and assign a password to each. You can change the password or name of the public key and erase the public key.

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Settings" → **OK**

3 [▼]/[▲]: "Public Key" → **OK**

4 Select the desired public key ("Public Key1" to "Public Key6"). → **OK**
    - To change a public key, select the public key. → **OK** 2 times →

Enter the 4-digit public key password. → Go to step 5.
    - To erase the public key, select the public key. → **OK** 2 times → Enter the 4-digit public key password. → Press and hold [C/✕]. → **OK** → [▼]/[▲]: "Yes" → **OK** → [✆☉]

5 Enter a name for the public key (5 characters max., page 42). → **OK**

6 Enter a 4-digit password for the public key. → **OK**

7 [▼]/[▲]: "Save" → **OK** → [✆☉]

Note:

- To receive SMS messages with your public key, inform others of your public key name.
- If you change the name of a public key which has messages in the receive list, the messages will remain in the receive list under the new public key name.
- If you erase a public key which has messages in the receive list, the messages will also be erased.
- If you forget the password assigned to a public key, contact your nearest Panasonic service centre.

Storing the PBX line access number (for PBX users only)

Store your PBX line access number (4 digits max.) so that SMS messages are sent properly. When sending SMS messages to entries in the phonebook or redial list, the PBX line access number is deleted. The default setting is "Off".

1 ▦ (centre of joystick) → ✉ → **OK**

2 [▼]/[▲]: "Settings" → **OK**

3 [▼]/[▲]: "PBX Access No." →
   OK

4 [▼]/[▲]: "On" → **OK**

5 Enter your PBX line access code
   and a dialling pause, if necessary.
   → **OK** 2 times → [✳⊙]

Voice mail service

Voice mail is an automatic answering
service offered by your service
provider/telephone company. After you
subscribe to this service, your service
provider/telephone company's voice
mail system answers calls for you when
you are unavailable to answer the phone
or when your line is busy. Messages are
recorded by your service provider/
telephone company, not your telephone.
When you have new messages, ⊠ is
displayed on the handset depending on
your service provider/telephone
company. Please contact your service
provider/telephone company for details
of this service.

Important:
- If ⊠ still remains on the display even
  after you have listened to new
  messages, turn it off by pressing and
  holding [C/⊠] for 2 seconds.

Intercom

Intercom calls can be made between handsets in the same radio cell.

Note:
- If you receive an outside call while talking on the intercom, you hear interrupt tones.
  To answer the call, press [✕⊙], then press [➘].
- When paging the handset for an intercom call, the paged handset beeps for 1 minute.

Making an intercom call

1 [INT]
2 To page a specific handset, enter the handset number.
  - To stop paging, press [✕⊙].
3 When you finish talking, press [✕⊙].

Answering an intercom call

1 Press [➘] to answer the page.
2 When you finish talking, press [✕⊙].

Note:
- Even when the ringer volume for outside calls is set to off (page 22), the handset rings at a low level for intercom calls.

Transferring calls, conference calls

Outside calls can be transferred between 2 handsets in the same radio cell.
2 handsets in the same radio cell can have a conference call with an outside party.
To make a conference call, the following 2 methods are available:
- Another person presses [➘] while one person is talking with an outside party ("Call share", page 18).
- One person pages another person during an outside call as follows.

1 During an outside call, press [INT] to put the call on hold.
2 Enter the desired handset number you want to transfer to.
3 Wait for the paged party to answer.
  - If the paged party does not answer, press [INT] to return to the outside call.
4 **To complete the transfer:**
  Press [✕⊙].
  - The outside call is routed to the handset.

  To establish a conference call:
  Press [3].
  - To leave the conference, press [✕⊙]. The other parties can continue the conversation.

Transferring a call without speaking to the other handset user

1 During an outside call, press [INT].
  → Enter the desired handset number.
  - ➘ flashes to indicate the outside call is on hold.
2 [✕⊙]
  - The outside call rings at the other handset.

Note:
- If the other handset user does not answer the call within 1 minute, the call rings at your handset again.

Answering a transferred call
Press [➘] to answer the page.
Note:
- After the paging party disconnects, you can talk to the outside caller.

Handset locator

You can locate a misplaced handset by paging it.

1 **Base unit:**
  Press [•))].
  - All registered handsets beep for 1 minute.
2 To stop paging:
  Base unit:
  Press [•))].
  Handset:
  Press [✕⊙].

Note:
- Even when the ringer volume for outside calls is set to off (page 22), the handset rings at a high level for paging.

Character entry

The dial keys are used to enter characters and numbers. Each dial key has multiple characters assigned to it. The available character entry modes are Alphabet (ABC), Numeric (0-9), Greek (ABΓ), Extended 1 (AÄÅ), Extended 2 (SŚŠ), and Cyrillic (АБВ). For SMS messages, Alphabet (ABC), Numeric (0-9), Greek (ABΓ), and Extended (AÄÅ) modes are available. When in these entry modes except Numeric, you can select which character is entered by pressing a dial key repeatedly.

– Use the joystick to move the cursor.
– Press dial keys to enter characters and numbers.
– Press [C/⊠] to erase the character or number highlighted by the cursor. Press and hold [C/⊠] to erase all characters or numbers.
– Press [✳] to switch between uppercase and lowercase.
– To enter another character located on the same dial key, push the joystick right to move the cursor to the next space, then press the appropriate dial key.

Character entry modes

Several character entry modes can be used when entering text. The characters that can be entered depend on the entry mode.

Characters available in each character entry mode

When the unit displays the character entry screen:
1/A/? (right soft key) → [▾]/[▴]: Select a character entry mode. → **OK**

Note:
● For character entry when writing SMS messages, see page 44.

Alphabet character table (ABC)

⓪	①	(ABC)②	(DEF)③	(GHI)④	(JKL)⑤	(MNO)⑥	(PQRS)⑦	(TUV)⑧	(WXYZ)⑨
Space 0	Space # & ' ( ) ✳ , - . / 1	A B C 2 a b c 2	D E F 3 d e f 3	G H I 4 g h i 4	J K L 5 j k l 5	M N O 6 m n o 6	P Q R S 7 p q r s 7	T U V 8 t u v 8	W X Y Z 9 w x y z 9

Numeric entry table (0-9)

⓪	①	(ABC)②	(DEF)③	(GHI)④	(JKL)⑤	(MNO)⑥	(PQRS)⑦	(TUV)⑧	(WXYZ)⑨
0	1	2	3	4	5	6	7	8	9

Greek character table (ABΓ)

⓪	①	(ABC)②	(DEF)③	(GHI)④	(JKL)⑤	(MNO)⑥	(PQRS)⑦	(TUV)⑧	(WXYZ)⑨
Space 0	Space # & ' ( ) ✳ , - . / 1	A B Γ 2	Δ E Z 3	H Θ I 4	K Λ M 5	N Ξ O 6	Π P Σ 7	T Y Φ 8	X Ψ Ω ϑ 9

Extended 1 character table (AÄÅ)

⓪	①	(ABC)②	(DEF)③	(GHI)④	(JKL)⑤	(MNO)⑥	(PQRS)⑦	(TUV)⑧	(WXYZ)⑨
Space 0	Space # & ' ( ) ✳ , - . / 1	A Á Ä Â Ã Ã Å Æ B Ç Ç 2	D E E É É È F 3	G G H I Ì Í Î Ï 4	J K L 5	M N Ñ O Ò Ó Ô Ö Ø 6	P Q R S Ş ß 7	T U Ù Ú Û Ü Ü V 8	W W X Y ý Z 9
		a á ä â ã ã å æ b ç ç 2	d e ê é é è f 3	g g h i ì í î ï 4	j k l 5	m n ñ o ò ó ô ö ø 6	p q r s ş ß 7	t u ù ú û ü ü v 8	w W x y ý z 9

● The following are used for both uppercase and lowercase:

ø Ş Ŵ ŷ

Extended 2 character table (SŚŠ)

⓪	①	(ABC)②	(DEF)③	(GHI)④	(JKL)⑤	(MNO)⑥	(PQRS)⑦	(TUV)⑧	(WXYZ)⑨
Space 0	Space # & ' ( ) ✳ , - . / 1	A Á Ä A B C Ç Č 2	D Ď E É Ě F 3	G H I Í 4	J K L Ł Ĺ Ľ 5	M N Ñ Ň O Ó Ö Ö 6 7	P Q R Ŕ R Ś Š Š 7	T Ť U Ú Ü Ü V 8	W X Y ý Z Ż Ž Ž 9
		a á ä A b c ç č 2	d ď e é ě f 3	g h i í 4	j k l ł ĺ ľ 5	m n ñ ň o ó ö ö 6 7	p q r ŕ r ś š š 7	t ť u ú ü ü v 8	w x y ý z ż ž ž 9

● The following are used for both uppercase and lowercase:

Ą Č Ę Ł Ĺ Ľ Ń Ŕ Ś Š ů ý Ż Ż Ž

Cyrillic character table (АБВ)

⓪	①	(ABC)②	(DEF)③	(GHI)④	(JKL)⑤	(MNO)⑥	(PQRS)⑦	(TUV)⑧	(WXYZ)⑨
Space 0 Г Є I ї ў	Space # & ' ( ) ✳ , - . / 1	А Б В Г 2	Д Е Ж З 3	И Й К Л 4	М Н О П 5	Р С Т У 6	Ф Х Ц Ч 7	Ш Щ Ъ Ы 8	Ь Э Ю Я 9

When writing SMS messages

Alphabet character table (ABC)

(0)	(1)	(ABC 2)	(DEF 3)	(GHI 4)	(JKL 5)	(MNO 6)	(PQRS 7)	(TUV 8)	(WXYZ 9)
Space 0	Space . @ / : ; * # + - 1 ^ ' , ! ¡ ? ¿ _ € £ $ ¥ ( ) [ ] { } & % \ ^ ~ | < > = ¤ §	A B C 2 a b c 2	D E F 3 d e f 3	G H I 4 g h i 4	J K L 5 j k l 5	M N O 6 m n o 6	P Q R S 7 p q r s 7	T U V 8 t u v 8	W X Y Z 9 w x y z 9

Numeric entry table (0-9)

(0)	(1)	(ABC 2)	(DEF 3)	(GHI 4)	(JKL 5)	(MNO 6)	(PQRS 7)	(TUV 8)	(WXYZ 9)
0	1	2	3	4	5	6	7	8	9

Greek character table (ABΓ)

(0)	(1)	(ABC 2)	(DEF 3)	(GHI 4)	(JKL 5)	(MNO 6)	(PQRS 7)	(TUV 8)	(WXYZ 9)
Space 0	Space . @ / : ; * # + - 1 ^ ' , ! ¡ ? ¿ _ € £ $ ¥ ( ) [ ] { } & % \ ^ ~ | < > = ¤ §	A B Γ 2	Δ E Z 3	H Θ I 4	K Λ M 5	N Ξ O 6	Π P Σ 7	T Y Φ 8	X Ψ Ω 9

Extended character table (AÄÅ)

(0)	(1)	(ABC 2)	(DEF 3)	(GHI 4)	(JKL 5)	(MNO 6)	(PQRS 7)	(TUV 8)	(WXYZ 9)
Space 0	Space . @ / : ; * # + - 1 ^ ' , ! ¡ ? ¿ _ € £ $ ¥ ( ) [ ] { } & % \ ^ ~ | < > = ¤ §	A À Á Â Ã Ä Å Æ B C Ç 2 a à á â ã ä å æ b c ç 2	D E È É Ê Ë E F 3 d e è é ê ë e f 3	G Ğ H Ì Í Î Ï Î 4 g ğ h ì í î ï î 4	J K L 5 j k l 5	M N Ñ O Ò Ó Ô Õ Ö ø 6 m n ñ o ò ó ô õ ö ø 6	P Q R S Ş ß 7 p q r s ş ß 7	T U Ù Ú Û Ü Ü V 8 t u ù ú û ü ü v 8	W X Y Z 9 w x y z 9

- The following are used for both uppercase and lowercase:

ø Ş

Error messages

If the unit detects a problem, one of the following messages is shown on the display.

Display message	Cause/solution
Check Tel Line	• The supplied telephone line cord has not been connected yet or not connected properly. Check the connections (page 10).
Failed	• Phonebook copy failed (page 21). Confirm the other handset (the receiver) is in standby mode and try again.
Incomplete	• The receiver's phonebook memory is full. Erase the unnecessary phonebook entries from the other handset (the receiver) and try again.
Invalid Number	• You tried to send an SMS message to a phone number saved in the phonebook, caller list, or redial list that is over 20 digits long.
Memory Full	• The phonebook memory is full. Erase unnecessary entries (page 20). • The bar call list memory is full. Erase unnecessary entries (page 28). • The maximum number of base units (4) is already registered to the handset. Cancel unused base unit registrations from the handset (page 30).
No link to base. Reconnect AC adaptor.	• The handset has lost communication with the base unit. Move closer to the base unit and try again. • Unplug the base unit's AC adaptor to reset the unit. Reconnect the adaptor and try again. • The handset's registration may have been cancelled. Re-register the handset (page 29).
SMS Full	• Erase unnecessary messages (page 35, 36).
Use rechargeable battery.	• A wrong type of batteries such as Alkaline or Manganese was inserted. Use only the rechargeable Ni-MH batteries noted on page 3, 11.
You must first subscribe to Caller ID.	• You must subscribe to a Caller ID service. Once you receive caller information after subscribing to a Caller ID service, this message will not be displayed.

Troubleshooting

If you still have difficulties after following the instructions in this section, disconnect the base unit's AC adaptor and turn off the handset, then reconnect the base unit's AC adaptor and turn on the handset.

General use

Problem	Cause/solution
The unit does not work.	• Make sure the batteries are installed correctly (page 11). • Fully charge the batteries (page 12). • Check the connections (page 10). • Unplug the base unit's AC adaptor to reset the unit and turn off the handset. Reconnect the adaptor, turn on the handset and try again. • The handset has not been registered to the base unit. Register the handset (page 29).
The handset display is blank or goes dark when on a call.	• The handset is in screen saver mode (page 13). Activate the handset display again by: – pushing the joystick left [◄] or right [►] when on a call. – pressing [✕ ☉] at all other times. • "LCD Dimming" is set to "Off" while on charge. Change the setting (page 23). • The handset is not turned on. Turn the power on (page 14).
I cannot hear a dial tone.	• The base unit's AC adaptor or telephone line cord is not connected. Check the connections. • If you are using a splitter to connect the unit, remove the splitter and connect the unit to the wall jack directly. If the unit operates properly, check the splitter. • Disconnect the base unit from the telephone line and connect the line to a known working telephone. If the working telephone operates properly, contact our service personnel to have the unit repaired. If the working telephone does not operate properly, contact your service provider/telephone company.

Problem	Cause/solution
I do not know how to erase →) (Missed call) from the display.	• There are unviewed missed calls remaining. View them using the following method. 1 ▦ (centre of joystick) → →) → **OK** 2 Push the joystick down to search from the most recent call, or push the joystick up to search from the oldest call.

Programmable settings

Problem	Cause/solution
I have changed the display language to a language I cannot read.	• Change the display language (page 14).
While programming, the handset starts to ring.	• A call is being received. Answer the call and start again after hanging up.
While programming, the display returns to standby mode.	• A call matching an entry in the bar call list is being received. Wait and try again later.
I cannot register a handset to a base unit.	• The maximum number of base units (4) is already registered to the handset. Cancel unused base unit registrations from the handset (page 30). • The maximum number of handsets (6) is already registered to the base unit. Cancel unused handset registrations from the base unit (page 29). • You entered the wrong PIN. If you forget your PIN, contact your nearest Panasonic service centre. • Place the handset and the base unit away from other electrical appliances.

Battery recharge

Problem	Cause/solution
The handset beeps and/or ▢ flashes.	• Battery charge is low. Fully charge the batteries (page 12).
I fully charged the batteries, but ▢ still flashes.	• Clean the charge contacts and charge again (page 12). • It is time to replace the batteries (page 11).
I fully charged the batteries, but the operating time seems to be shorter.	• Clean the battery ends (⊕, ⊖) and the charge contacts with a dry cloth, and charge again.

Making/answering calls, intercom

Problem	Cause/solution
ᵞ is flashing.	• The handset is not registered to the base unit. Register it (page 29). • The handset is too far from the base unit. Move closer. • The base unit's AC adaptor is not connected. Check the connections. • You are using the handset or base unit in an area with high electrical interference. Place the base unit and use the handset away from sources of interference.
Noise is heard, sound cuts in and out.	• You are using the handset or base unit in an area with high electrical interference. Place the base unit and use the handset away from sources of interference. • Move closer to the base unit. • If you use a DSL/ADSL service, we recommend connecting a DSL/ADSL filter between the base unit and the telephone line jack. Contact your DSL/ADSL provider for details.
The handset does not ring.	• The ringer volume is turned off. Adjust ringer volume (page 22). • Night mode is turned on. Turn it off (page 26).
I cannot make a call.	• The dialling mode may be set incorrectly. Change the setting (page 14). • The handset is too far from the base unit. Move closer and try again. • Another unit is in use. Wait and try again later. • You dialled a call restricted number (page 27). • The key lock feature is turned on. Turn it off (page 18).

Caller ID

Problem	Cause/solution
Caller information is not displayed.	• You must subscribe to a Caller ID service. Contact your service provider/telephone company for details. • If your unit is connected to any additional telephone equipment, remove and plug the unit directly into the wall jack. • If you use a DSL/ADSL service, we recommend connecting a DSL/ADSL filter between the base unit and the telephone line jack. Contact your DSL/ADSL provider for details. • Other telephone equipment may be interfering with this unit. Disconnect the other equipment and try again.
Caller information is slow to display.	• Depending on your service provider/telephone company, the unit may display the caller's information at 2nd ring or later. • Move closer to the base unit.
Time on the unit has shifted.	• Incorrect time information from incoming Caller ID changes the time. Set the time adjustment to off (page 25).

SMS (Short Message Service)

Problem	Cause/solution
I cannot send or receive SMS messages.	• You have not subscribed to the appropriate service. Contact your service provider/telephone company. • The SMS message centre number(s) are not stored or are incorrect. Store the correct numbers (page 33). • Message transmission was interrupted. Wait until the message has been sent before using other telephone functions. • If you use a DSL/ADSL service, we recommend connecting a DSL/ADSL filter between the base unit and the telephone line jack. Contact your DSL/ADSL provider for details.

Problem	Cause/solution
The SMS message centre number is logged in the caller list and the message is not received.	• Someone tried to send you a message while SMS is turned off. Turn it on (page 33).
"This message contains unrecognized characters." is displayed.	• You have received a message which contains Chinese characters. Ask the sender to write the message using non-Chinese characters.
"FD" is displayed.	• The unit could not connect to the SMS message centre. Confirm that the correct SMS message centre numbers are stored (page 33). Confirm that SMS is turned on (page 33).
"FE" is displayed.	• An error occurred while sending the message. Try again.
"✓" is not displayed after I read a message.	• When an error code ("FD" or "FE") is displayed, "✓" will not be displayed even if you have read the message.

Liquid damage

Problem	Cause/solution
Liquid or other form of moisture has entered the handset/base unit.	• Disconnect the AC adaptor and telephone line cord from the base unit. Remove the batteries from the handset and leave to dry for at least 3 days. After the handset/base unit are completely dry, reconnect the AC adaptor and telephone line cord. Insert the batteries and charge fully before use. If the unit does not work properly, contact your nearest Panasonic service centre.

Caution:
• To avoid permanent damage, do not use a microwave oven to speed up the drying process.

Specifications

■ **Standard:**
DECT (Digital Enhanced Cordless Telecommunications),
GAP (Generic Access Profile)

■ **Number of channels:**
120 Duplex Channels

■ **Frequency range:**
1.88 GHz to 1.90 GHz

■ **Duplex procedure:**
TDMA (Time Division Multiple Access)

■ **Channel spacing:**
1,728 kHz

■ **Bit rate:**
1,152 kbit/s

■ **Modulation:**
GFSK (Gaussian Frequency Shift Keying)

■ **RF transmission power:**
Approx. 10 mW (average power per channel)

■ **Voice coding:**
ADPCM 32 kbit/s

■ **Power source:**
220–240 V AC, 50 Hz

■ **Power consumption**
Base unit:
Standby: Approx. 2.1 W
Maximum: Approx. 6.0 W

■ **Operating conditions:**
5 °C–40 °C, 20 %–80 % relative air humidity (dry)

■ **Dimensions:**
Base unit: Approx. 48 mm × 99 mm × 155 mm
Handset: Approx. 149 mm × 48 mm × 34 mm

■ **Mass (weight):**
Base unit: Approx. 160 g
Handset: Approx. 120 g

Note:
• Design and specifications are subject to change without notice.
• The illustrations in these instructions may vary slightly from the actual product.

Index

Notes